This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-20 (cancelled).

Claim 21. (New): A method for preventing or treating migraine headaches, cortical spreading depression and other headache conditions and symptoms of such conditions in a mammalian subject in need thereof comprising administering an effective amount of a treatment composition having ion-dependent cotransporter antagonist activity to the central nervous system of the subject.

Claim 22. (New): The method of claim 21, wherein the treatment composition has cation chloride cotransporter antagonist activity.

Claim 23. (New): The method of claim 21, wherein the treatment composition comprises a loop diuretic.

Claim 24. (New): The method of claim 21, wherein the subject is a human.

Claim 25. (New): The method of claim 21, additionally comprising administering an effective amount of a blood brain barrier permeability enhancer.

Claim 26. (New): The method of claim 21, additionally comprising administering a hyperosmotic agent.

Claim 27. (New): The method of claim 21, wherein the treatment composition comprises an agent selected from the group consisting of loop diuretics, furosemide and furosemide-related compositions, and thiazides and thiazide-like compositions.

Claim 28. (New): The method of claim 21, additionally comprising administering an agent selected from the group consisting of anti-migraine agents, beta blockers, calcium channel

blockers, non-steroidal anti-inflammatory drugs, neuroleptics, corticosteroids, vasoconstrictors, antidepressants, anticonvulsants, serotonin receptor agonists, ergot alkaloids and benzodiazepines.

Claim 29. (New): The method of claim 21, additionally comprising administering an agent selected from the group consisting of: tryptans, acetaminophen, caffeine, ibuprofen, propoxyphene, oxycodone, codeine, isometheptene, ergotamine, dihydroergotamine, sumagriptan, propanolol, metoprolol, atenolol, timolol, nadolol, nifedipine, nimodipine, verapamil, aspirin, ketoprofen, tofenamic acid, naproxen, methysergide, paracetamol, clonidine, lisuride, iprazochrome, butalbital, benzodiazepines, serotonin receptor agonists and divalproex sodium.

Claim 30. (New): The method of claim 22, wherein the treatment composition has glial cell $Na^+K^+2CL^-$ chloride-dependent cotransporter antagonist activity.

Claim 31. (New): The method of claim 22, wherein the treatment composition exhibits a high degree of activity in glial cell populations and a lesser degree of activity in neuronal and renal cell populations.

Claim 32. (New): The method of claim 22, wherein the subject is a human.

Claim 33. (New): The method of claim 25, wherein the blood brain barrier permeability enhancer is selected from the group consisting of leukotrienes, bradykinin agonists, histamine, tight junction disruptors, hyperosmotic solutions, cytoskeletal contracting agents and short chain alkylglycerols.

Claim 34. (New): The method of claim 27 wherein the thiazide and thiazide-like compositions are selected from the group consisting of bendoroflumethiazide, benzthiazide, chlorothiazide; hydrochlorothiazide, hydroflumethiazide, methclothiazide, polythiazide, trichlormethiazide, chlorthalidone, indapamide, metolazone and quinethazone.

Claim 35. (New): A method for treating migraine headache, cortical spreading depression and other headache conditions in a mammalian subject comprising administering an effective amount of a treatment composition that modulates the synchronization of neuronal discharges in the central nervous system.

Claim 36. (New): The method of claim 35, wherein the treatment composition produces diminished hypersynchronization of neuronal population activity in the central nervous system.

Claim 37. (New): The method of claim 35, wherein the treatment composition produces modulation of the chloride concentration in extracellular space in the central nervous system.

Claim 38. (New): A method for treating migraine headache, cortical spreading depression and other headache conditions in a mammalian subject in need thereof comprising administering an effective amount of a treatment composition having ion-dependent cotransporter antagonist activity, wherein the treatment composition comprises an agent selected from the group consisting of loop diuretics, furosemide and furosemide-related compositions and thiazides and thiazide-like compositions.

Claim 39. (New): The method of claim 38, additionally comprising administering an effective amount of a blood brain barrier permeability enhancer.

Claim 40. (New): The method of claim 38, wherein the treatment composition is formulated to facilitate crossing of the blood brain barrier.